

June 19, 2012

Ms. Lisa Jackson
Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Mr. Arthur A. Elkins, Jr.
Inspector General
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
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**Re: May 4, 2012 Correspondence from John Hall & Associates on behalf of the Great Bay
Municipal Coalition**

Dear Administrator Jackson and Inspector General Elkins:

On May 4, 2012, John Hall & Associates wrote to you on behalf of the so-called Great Bay Municipal Coalition consisting of five municipalities (Portsmouth, Dover, Exeter, Rochester and Newmarket, NH) that own and operate wastewater treatment facilities (WWTFs) that discharge into waters that are part of or directly affect the Great Bay estuary. As you know, none of these WWTFs currently have National Pollutant Discharge Elimination System (NPDES) permits limiting the discharge of total nitrogen. Mr. Hall's May 4 correspondence is the latest example of an unfortunate and misguided sustained attack by the Municipal Coalition against the Environmental Protection Agency (EPA) and N.H. Department of Environmental Services (NHDES) and their efforts to solve the problems facing the Great Bay estuary. The Municipal Coalition's highly unusual and baseless claims of science misconduct are deeply troubling and represent yet another tactic aimed at delaying actions needed to restore the health of the Great Bay estuary. I am writing to address particularly egregious aspects of the Municipal Coalition's letter.

- I. **The foundation of the Municipal Coalition's argument – that EPA and NHDES departed from and abandoned the "scientific consensus" of a Great Bay Technical Advisory Committee – is false and utterly lacking in factual basis**

As the very foundation of the arguments set forth in their letter, Mr. Hall and the Municipal Coalition assert that "an independent, federally funded Technical Advisory Committee (TAC) for the Great Bay Estuary" conducted "[d]etailed site-specific research . . . on the factors influencing the Estuary and in particular the effect of nutrient concentrations on both the tidal rivers and Great Bay." See John Hall & Associates letter to Administrator Jackson and Inspector General Elkins, May 4, 2010 (hereinafter "Hall correspondence") at 1-2. They proceed to describe the TAC as having reached "scientific consensus" on

six specific issues¹ and as having reached scientific “findings” and “technical conclusions.” *Id.* at 2-3. With this as their launching point, they then proceed to attack NHDES and EPA for engaging in the development of criteria that run counter to the “findings” and “technical conclusions” of the TAC. The Municipal Coalition’s charges are utterly baseless.

A. The Municipal Coalition has mischaracterized the nature and role of the TAC

Mr. Hall’s and the Municipal Coalition’s characterization of the TAC is grossly misleading. First, the TAC was not a specific “federally funded” body that itself engaged in site-specific research. Rather, it was a group of volunteers (including university researchers, individuals associated with the Municipal Coalition, CLF, and The Nature Conservancy) and agency staff who met on occasion to discuss the status of NHDES’s nutrients analysis, to learn of methods and approaches being taken elsewhere, to learn of the status and results of certain research, and to provide the N.H. Estuary Project (predecessor to the Piscataqua Region Estuaries Partnership) feedback and advice. Second, at no time did the TAC reach, or even to attempt to reach, “scientific consensus” on specific issues; nor did it render, as a body, any scientific “findings” or “technical conclusions.” Third, even if the TAC *had* reached “scientific consensus” on key issues as suggested by the Hall correspondence (which it did not), the TAC – consistent with its name – was *advisory* in nature (i.e., its advice was not binding on NHDES). Indeed, contrary to Mr. Hall’s and the Municipal Coalition’s misrepresentations, the minutes provided as Exhibit 1 of the Hall correspondence demonstrate the true advisory nature of the TAC and its role providing feedback, as well as the fact that no official consensus, conclusions or findings were rendered by this group. In sharp contrast to these facts, the Hall correspondence is replete with mischaracterizations of the TAC as having reached definitive scientific consensus, conclusions and findings relative to nitrogen issues and the development of criteria. See Hall correspondence at 2 (“scientific consensus”), 3 (“TAC findings”, “TAC technical conclusions”), 4 (“*the precise impact the TAC concluded did not exist*” (emphasis in original), “TAC findings”), 8 (“Region I has purposefully ignored the valid scientific findings of the TAC”). These characterizations have no basis in fact and are entirely inaccurate.

B. The Municipal Coalition has mischaracterized the NHDES 2009 nitrogen analysis as departing from or ignoring the purported “scientific consensus” and “findings” of the TAC

As the primary basis for leveling its charges of scientific misconduct – serious charges that one would expect to be based on accurate facts – Mr. Hall and the Municipal Coalition assert that “Region I has (1) purposefully ignored *the valid scientific findings of the TAC* that a ‘cause and effect’ relationship between eelgrass loss, transparency, and TN did not exist.” Hall correspondence at 9 (emphasis added).² Not stopping there, Mr. Hall and the Municipal Coalition further rely on their inaccurate

¹ The manner in which the Hall correspondence is formatted might lead one to believe that the six matters on which the TAC purportedly reached “scientific consensus” were excerpted directly from a TAC document. As a review of the TAC minutes reveal (Hall correspondence, Exhibit 1), this is not the case. Rather the language describing six areas of purported “consensus” is that of Mr. Hall. Moreover, as described below, the characterization of those six matters as matters on which the TAC reached “scientific consensus” is simply not accurate.

² Mr. Hall, testifying under oath on behalf of the Municipal Coalition at a June 4, 2012 Congressional field hearing conducted by Congressmen Issa and Guinta in Exeter, New Hampshire, made similar representations, stating: “The communities believe that the record is clear that the Region was determined to implement a pre-defined regulatory agenda of stringent nitrogen limits (1) even after a federally funded technical advisory committee for the Great Bay confirmed there was no cause and effect relationship between nitrogen, transparency, and eelgrass

characterization of the TAC in their incredible allegation that EPA, apparently as part of a larger conspiracy, engaged in "the manipulation of real data to produce a false conclusion," claiming:

Neither Region I, Dr. Short, nor DES can claim ignorance of the lack of scientific justification for the proposed transparency-based TN restrictions, **as they were present at the TAC meetings wherein it was expressly concluded** that increased TN concentrations *had not caused increased algal growth causing significantly lower transparency levels*. In contradiction to their later research claims, the federal research reviewed by the TAC expressly determined that a significant relationship between TN and transparency did not exist. The TAC minutes confirmed that the changing physical factors unrelated to TN (color, dilution, salinity, and turbidity) actually controlled the transparency existing at those different sites.

Hall correspondence at 9 (bold emphasis added; italics in original). *See also id.* at 9 ("the conclusions of which were expressly agreed upon in formal State/Federal TAC meetings"), 14 (alleging that EPA engaged in misconduct by "[i]gnoring TAC conclusions based on federally-funded Great Bay research. . .").

To reiterate, the Municipal Coalition's characterizations of the TAC as a formal, federally funded body that reached scientific consensus and technical conclusions are simply false. Building on these inaccuracies, the Municipal Coalition attempts to characterize the development of numeric nutrient thresholds for the Great Bay estuary as a radical departure from, and as ignoring, the purported conclusions of the TAC. In doing so, the Municipal Coalition overlooks key facts, including the following:

- **The TAC reviewed and commented on a November 2008 draft numeric nutrient threshold analysis.** On November 12, 2008, NHDES published a document titled "Nutrient Criteria for New Hampshire's Estuaries." *See* Exhibit 1. The document, marked as "Draft for Review and Comment," included a total nitrogen numeric threshold of 0.32 mg/L for aquatic life support to protect eelgrass. It based this numeric threshold on water transparency issues related to eelgrass and explicitly noted that certain additional research was needed relative to the threshold. Importantly, the draft analysis was made available to the TAC prior to the TAC's meeting of November 17, 2008. Members of the TAC were provided the opportunity to comment on the draft analysis both during and after the November 17 meeting. Based on the Municipal Coalition's characterization of the TAC as having reached scientific consensus that nitrogen-related transparency was not an issue for eelgrass in the estuary, one would expect the draft analysis to have generated a fire-storm of opposition by the TAC. It did not.
- **The public, including members of the Municipal Coalition and the TAC, had the opportunity to review and comment on a December 2008 draft numeric nutrient threshold analysis.** On December 30, 2008, having received input from the TAC, NHDES published a next iteration of its numeric nitrogen threshold analysis, this time entitled (as a result of TAC feedback) "Nutrient Criteria for the Great Bay Estuary." *See* Exhibit 2. Like the prior version, the document was marked "Draft for Review and Comment." The analysis again identified a total nitrogen numeric threshold of 0.32 mg/L for aquatic life support to protect eelgrass, this time providing greater specificity about the waters to which the numeric threshold would apply. On January 9, 2009, NHDES published the document to a large number of stakeholders, including

loss. . . ." *See* <http://oversight.house.gov/hearing/field-hearing-epa-overreach-and-the-impact-on-new-hampshire-communities/>

municipal officials, providing a 30-day time period (with a February 9, 2009 deadline) for public review and comment. See Exhibit 3. The draft document also was published to NHDES's Water Quality Standards Advisory Committee (WQSAC) with notice that the analysis would be presented at the WQSAC's January 22, 2009 meeting and that written comments could be submitted by February 9, 2009. See Exhibit 4. Importantly, at the WQSAC's meeting of January 22, 2009, Peter Rice, City of Portsmouth staff, stated that the City of Portsmouth had hired a consultant to conduct a "peer review" of the draft nutrient thresholds analysis and that they were requesting an extension of the February 9 comment period to mid-March. On January 30, 2009, NHDES notified interested parties that the February 9 deadline had been extended to March 20, 2009. See Exhibit 5. On that date, the City of Portsmouth and other members of the Municipal Coalition jointly submitted comments, including technical memoranda prepared by two consultants. See Exhibit 6. Other stakeholders submitted comments at that time as well. See *e.g.*, Exhibits 7 (comments of CLF), 8 (comments of The Nature Conservancy).

- **NHDES specifically responded to comments on the draft numeric threshold analysis.** As part of the final Numeric Nitrogen Criteria for the Great Bay Estuary (June 2009), NHDES responded to comments submitted on the prior draft document, including comments submitted by members of the Municipal Coalition.

The foregoing facts strongly contradict the Municipal Coalition's effort to characterize the TAC as having reached scientific consensus and as the development of numeric nitrogen thresholds, including the final 2009 thresholds, as some radical departure by NHDES and EPA from the TAC. The above facts also strongly contradict the Municipal Coalition's claims that they were not provided an adequate opportunity to provide input regarding development of the numeric nitrogen thresholds. The inaccurate characterizations at the core of the Municipal Coalition's arguments undermine the accuracy and credibility of their entire letter to you. Regrettably, the mischaracterization of facts and/or the selective use of facts outside their factual context appear to be part of a larger pattern of conduct by the Municipal Coalition.³

C. The Municipal Coalition's arguments are based on the flawed premise that scientific understanding and analysis must be fixed in time and cannot evolve

Even if the TAC *could* accurately be characterized as an independent federally funded body that reached a scientific consensus, the Municipal Coalition suggests, improperly, that scientific knowledge regarding nitrogen and its impacts on the estuary is somehow static and could not evolve beyond the purported "scientific consensus" of the TAC. NHDES has developed and continues to develop a greater understanding of the issues surrounding the Great Bay estuary, as documented in the analyses leading

³ See *e.g.* Exhibit 9 (Technical Memorandum to John Hall from HydroQual, Jan. 10, 2011) and Exhibit 10 (NHDES Comments on HydroQual's Technical Memorandum). See also Hall letter at 3 (characterizing CLF Oct. 6, 2008 correspondence to EPA); *id.* at 7 (stating without any support that in 2011 "DES agreed that there remained a significant degree of uncertainty with regard to the draft numeric [total nitrogen] standards"); *id.* at 7 (inaccurately suggesting that "open technical meetings" with University of New Hampshire researchers, NHDES and EPA resulted in a "consensus that the impairment mechanism attributed to the loss of eelgrass in the June 2009 Criteria – loss of light transparency due to increased phytoplankton growth – *did not occur and was not the cause of eelgrass changes in Great Bay.*") (emphasis in original).

up to and including the 2009 numeric nutrient criteria, and as set forth in more recent analyses. See Exhibit 11 (NHDES Response to Public Comment on the Draft 2012 Consolidated Assessment and Listing Methodology (CALM), Apr. 20, 2012 (excerpts)); Exhibit 12 (New Hampshire's 2012 Section 305(b)/303(d) List, Technical Support Document, Assessments of Aquatic Life Use Support in the Great Bay Estuary for Chlorophyll-a, Dissolved Oxygen, Water Clarity, Eelgrass Habitat, and Nitrogen, Apr. 20, 2012).

II. The NHDES 2009 analysis was, contrary to the Municipal Coalition's claims, subject to independent peer review.

The Municipal Coalition claims that the 2009 NHDES nutrients analysis was not subjected to independent peer review. Contrary to Mr. Hall's and the Municipal Coalition's claim, it was. The peer reviewers are highly regarded independent experts in the field of estuarine biogeochemistry and eutrophication⁴ and in no way beholden to EPA or any other regulatory body, or to any of the regulated entities in the Great Bay estuary watershed. The Municipal Coalition suggests that because they were not allowed to influence the substance of the questions, the peer review lacked independence. To the contrary, the independence of the peer review would come into question if the Municipal Coalition, as regulated entities, had been permitted to influence that review.

III. The Municipal Coalition appears more interested in delaying needed actions than in implementing needed pollution reduction measures

Through public statements, the Municipal Coalition has attempted to make clear that it cares about the health of the Great Bay estuary and taking steps to safeguard its future. Unfortunately, at least with respect to certain members of the Municipal Coalition, it appears that delay is the primary goal and motivating factor. For example, whereas the Municipal Coalition has expressed a willingness on the part of some of its members to "immediately" proceed with WWTF upgrades to achieve an effluent limit of 8 mg/L total nitrogen in combination with a so-called Adaptive Management Plan, the Municipal Coalition also has made clear that if EPA issues permits establishing a 3 mg/L limit, its members will appeal those permits and will take *no* action to upgrade WWTFs while appeals are pending, *even if EPA allows a compliance schedule enabling WWTFs to initially upgrade to 8 mg/L and obviating the need for further WWTF upgrades if – through a combination of WWTF improvements and other measures – water quality standards are met*. Thus, it appears the Municipal Coalition is content to hold the estuary hostage, holding out for a permit limit of 8 milligrams N/L even if EPA were to allow an incremental approach to implementation.

The objective of delaying needed action also is strongly evident in the actions (and in some cases inaction) of the City of Portsmouth, a prominent and leading member of the Municipal Coalition. In 1985, the City of Portsmouth was granted a waiver from the Clean Water Act's requirement that WWTFs achieve secondary treatment levels. As a result of that waiver, the City of Portsmouth's 4.5 million-gallon-per-day capacity Pierce Island WWTF is one of a handful of WWTFs across the nation operating with only primary treatment – even though, technically, its 1985 NPDES permit and accompanying Section 301(h) waiver expired in 1990. In June 2010, after EPA's April 2007 denial of the City's request for a renewal of its 1985 waiver and issuance of an NPDES permit requiring it to upgrade from enhanced primary treatment to secondary treatment, the City of Portsmouth presented EPA with a detailed study

⁴ See Correspondence from Drs. Ivan Valiela and Erin Kinney, appended as Exhibit 13, at 8-9 (discussing credentials of EPA's peer reviewers).

pursuant to which it proposed to a final date by which it would complete its upgrade to secondary treatment. Incredibly, the City of Portsmouth proposed **2028** as the year by which it would complete its upgrade and eliminate all primary-treated discharges. By letter dated September 20, 2010, the EPA appropriately rejected the City of Portsmouth's schedule as "unacceptably long, especially in comparison to what other municipalities with similar financial and technological issues have accomplished." See Exhibit 14. Nearly two years after proposing its unreasonably long schedule with a 2028 completion date, and approximately five years – a roughly a full permit cycle – since EPA's issuance of a permit requiring secondary treatment, the City of Portsmouth recently approved a new schedule, currently under review by EPA, proposing completion of secondary treatment in 2017. If that schedule is adopted, it will have taken the City ten years – two NPDES permit cycles – to upgrade just to secondary treatment. In light of the City of Portsmouth's foot-dragging – roughly a full five-year permit cycle – merely to commit to a schedule to upgrade from enhanced-primary treatment to secondary treatment, it is difficult to interpret the City of Portsmouth's actions with respect to nitrogen controls as anything other than efforts to delay needed WWTF upgrades.

Public comments by City of Portsmouth staff further reveal a concerted intent to delay needed solutions. Initially, officials from the City of Portsmouth and other members of the Municipal Coalition resisted the need to fully reduce nitrogen discharges from WWTFs on the ground that stormwater pollution and non-point sources represented the larger share of the estuary's nitrogen load. Thus, they contended, efforts to reduce nitrogen pollution should focus on those other sources. In October 2011, after it was reported that EPA was signaling a willingness to allow an incremental approach to WWTF upgrades on the condition that the regulated municipalities implement – and demonstrate real progress in – measures to reduce nitrogen pollution from stormwater,⁵ City of Portsmouth staff quickly changed their tune. Specifically, after commenting on various steps the City of Portsmouth had taken to better manage stormwater and promote low impact development, the City of Portsmouth's engineer reportedly commented to the Portsmouth Herald that "there is no real data yet on the effectiveness of some of these steps [to address the non-point pollution problem]." See Exhibit 15. It was further reported that: "The Great Bay Coalition communities have advocated for a phased and cautious approach to the nitrogen limits at the wastewater treatment plants *and are advocating for a similar approach to addressing the non-point sources.*" *Id.* (emphasis added). These statements evidence a concerted lack of urgency and a persistent willingness to delay needed action.

It also bears noting that the City of Portsmouth, despite continuously expressing concern about the cost of updating its WWTFs and addressing the problem of nitrogen pollution, apparently is far behind other communities in its willingness to generate wastewater funding from new development. According to a December 9, 2011 memorandum prepared by the Town of Durham's Department of Public Works (appended as Exhibit 16), some Seacoast communities generate funds through meaningful sewer connection fees. According to the above-referenced memorandum, for example, for a 100-bed mixed use (commercial/residential) development, the Town of Somersworth would charge a sewer connection fee of \$180,000. Exhibit 16, Table at page 4. The City of Dover would charge a lesser fee of \$53,000. *Id.* According to the attached memorandum, the City of Portsmouth, despite major new hotels and other development and re-development that could generate funds to support wastewater treatment, apparently would charge an equivalent development a sewer connection fee of a mere \$250. *Id.*

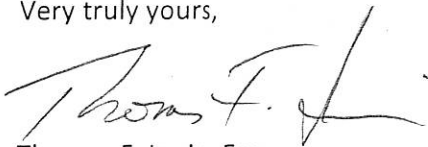
⁵ "EPA may ease nitrogen limit," Portsmouth Herald, Aug. 21, 2011, <http://www.seacoastonline.com/articles/20110821-NEWS-108210340?cid=sitesearch>.

IV. Fortunately, other Seacoast communities appear willing to take constructive action and to work toward meaningful solutions as opposed to delay tactics

Contrary to the Municipal Coalition's efforts to thwart – at every step of the way – meaningful action to reduce nitrogen pollution in the Great Bay estuary in compliance with the Clean Water Act, other communities have expressed a willingness to be part of the solution. For example, the Town of Newington, a New Hampshire Seacoast municipality with a WWTF, strongly supports the NPDES permits proposed by EPA and has stated on the record that it "currently has plans underway to upgrade our wastewater treatment plant to the proposed standard of 3 milligrams per liter." See Exhibit 17. The Town of Durham, once part of the Municipal Coalition, has consciously chosen to "take a pass" on the Municipal Coalition's tactics of its May 4 letter to you and the lawsuit filed against NHDES in N.H. Superior Court, opting instead to proactively work with EPA to address nitrogen pollution from both its WWTF and stormwater sources. See Exhibit 18. It is our hope that members of the Municipal Coalition soon will desist from their efforts to delay needed action and work toward real, meaningful solutions.

We regret that the Municipal Coalition has taken the recent actions that it has (i.e., its May 4, 2012 letter to you; its recent lawsuit against NHDES; its recent politicization of the EPA regulatory process in a recent Congressional field hearing) in an effort to de-rail needed action required under the Clean Water Act to restore the health of the Great Bay estuary. These actions represent a significant opportunity cost on the part of the regulatory agencies, diverting attention away from implementing solutions to the estuary's water pollution problems. We commend EPA for its work on this important issue and urge it to move forward promptly with Clean Water Act permitting consistent with the requirements of that law to solve the problem of nitrogen pollution in the Great Bay estuary.

Very truly yours,



Thomas F. Irwin, Esq.

Vice President & CLF-New Hampshire Director

Encls.

cc: Nancy K. Stoner, U.S. Environmental Protection Agency,
Office of Water

